**Divergent Boundaries—Ocean from Ocean** Name:

Period:

*This exercise will help you see what happens to Earth's crust at divergent boundaries.*


Step 1—Get the 2 pieces of paper that you will use to make your block model. One will be a new piece, the other you already got earlier on a top piece page.

Step 2—Color the different layers on the block and on the top piece, using the colors listed in the coloring key. The key will end up being on the bottom of your block. Not all of the patterns and colors will be used.

Step 3—Cut out the block and the top piece. Fold along the dashed lines. Get the top piece and glue the end marked A to the tab marked A on the block. DO NOT GLUE ANY OTHER TABS. You will need to be able to fold it up again and keep it in your binder.

Step 4—Lay out your 5 map pieces again.

Step 5—Use the information from the 5-piece map and the divergent blocks to answer the questions.

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1. What is the area that has oceanic plates pulling away from each other to make what you see in this block? *Hint: look at the map on the side of the block.*

2. Look at the patterns on the sides of the block. What kind of crust is found in these rift zones?

   The kind of crust under these rift zones is _____ .

3. The side of the block shows magma melting up through the crust, where it will eventually squeeze out of cracks on the crust surface as lava. Where does this magma come from? *[Hint: read the key to your block]*

4. What does magma make after it squeezes through fractures to the surface of the crust?

5. Remember that each tiny black dot printed on your map represents where earthquakes have happened. Why are there lines of earthquakes along the center of the Atlantic Ocean?

6. A classmate suggests that, because of the hot lava melting ocean crust down the center of the Atlantic, South America and Africa are moving closer together. Are they correct? Explain your answer.

7. Look at the sides of your divergent continent-from-continent block. How is its crust different than that of your divergent ocean-from-ocean block?

Lab: 8 points